APPLICATION FOR UNITED STATES PATENT DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I declare that my residence, post office address and citizenship are as stated below next to my name; that I verily believe that I am the original, first and sole inventor if only one name is listed below, or an original, first and joint inventor if plural inventors are named below, of the subject matter which is claimed and for which a patent is sought on the invention entitled as set forth below, which is described in the attached specification; that I have reviewed and understand the contents of the specification, including the claims, as amended by any amendment specifically referred to in the oath or declaration; that no application for patent or inventor's certificate on this invention has been filed by me or my legal representatives or assigns in any country foreign to the United States of America; and that I acknowledge my duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, section 1.56(a);

TITLE OF INVENTION:	Equilibrium Based Horizontal Sync Detector for Video Decoder			
POWER OF ATTORNEY:	I HEREBY APPOINT THE FOLLOWING ATTORNEYS TO PROSECUTE THE APPLICATION AND TRANSACT ALL BUSINESS IN THE PATENT AND TRADEMARK OFFICE CONNECTED THEREWITH			
	Customer Number: 23494			
SEND CORRESPONDENCE TO: Dan Swayze		DIRECT TELEPHONE CALLS TO:		
Texas Instruments Incorporated P. O. Box 655474, M/S 3999 Dallas, Texas 75265		Dan Swayze 972-917-5633		
NAME OF INVENTOR: (1) Karl Renner	NAME OF INVENTOR: (2) Walter Heinrich Demmer	NAME OF INVENTOR: (3) Jason M. Meiners		
RESIDENCE (City and State Only) Dallas, Texas	RESIDENCE (City and State Only) Nuremberg, Germany	RESIDENCE (City and State Only) Richardson, Texas		
POST OFFICE ADDRESS 7415 Hundley Dallas, Texas 75231	POST OFFICE ADDRESS Dormitzer Str. 3 Nuremberg, Germany 90411	POST OFFICE ADDRESS 3504 Waltham Drive Richardson, Texas 75082		
COUNTRY OF CITIZENSHIP: USA	COUNTRY OF CITIZENSHIP: Germany	COUNTRY OF CITIZENSHIP:		
SIGNATURE OF INVENTOR:	SIGNATURE OF INVENTOR:	SIGNATURE OF INVENTOR:		
July 22,2003	DATE	DATE:		

APPLICATION FOR UNITED STATES PATENT DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I declare that my residence, post office address and citizenship are as stated below next to my name; that I verily believe that I am the original, first and sole inventor if only one name is listed below, or an original, first and joint inventor if plural inventors are named below, of the subject matter which is claimed and for which a patent is sought on the invention entitled as set forth below, which is described in the attached specification; that I have reviewed and understand the contents of the specification, including the claims, as amended by any amendment specifically referred to in the oath or declaration; that no application for patent or inventor's certificate on this invention has been filed by me or my legal representatives or assigns in any country foreign to the United States of America; and that I acknowledge my duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, section 1.56(a);

TITLE OF INVENTION:	Equilibrium Based Horizontal Sync Detector for Video Decoder		
POWER OF ATTORNEY:	I HEREBY APPOINT THE FOLLOWING ATTORNEYS TO PROSECUTE THIS APPLICATION AND TRANSACT ALL BUSINESS IN THE PATENT AND TRADEMARK OFFICE CONNECTED THERE WITH		
	Customer Number: 23494	·	
SEND CORRESPONDENCE TO: Dan Swayze		DIRECT TELEPHONE CALLS TO:	
Texas Instruments Incorporated P. O. Box 635474, M/S 3999 Dallas, Texas 75265		Dan Swayze 972-917-5633	
NAME OF INVENTOR: (1) Karl Renner	NAME OF INVENTOR: (2) Walter Heinrich Demmer	NAME OF INVENTOR: (3) Jason M. Meiners	
RESIDENCE (City and State Only) Dallas, Texas	RESIDENCE (City and State Only) Nuremberg, Germany	RESIDENCE (City and State Only) Richardson, Texas	
POST OFFICE ADDRESS 7415 Hundley	POST OFFICE ADDRESS Dormitzer Str. 3	POST OFFICE ADDRESS 3504 Waltham Drive	
Dallas, Texas 75231 COUNTRY OF CITIZENSHIP:	Nuremberg, Germany 90411 COUNTRY OF CITIZENSHIP:	Richardson, Texas 75082 COUNTRY OF CITIZENSHIP:	
USA SIGNATURE OF INVENTOR:	Germany SIGNAPURE OF INVENTOR:	USA SIGNATURE OF INVENTOR:	
	Caller Lewen		
DATE:	DATE:	DATE:	
	July 16, 2003		

ATTORNEY'S DOCKET NO. TI-35821

APPLICATION FOR UNITED STATES PATENT DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I declare that my residence, post office address and citizenship are as stated below next to my name; that I verily believe that I am the original, first and sole inventor if only one name is listed below, or an original, first and joint inventor if plural inventors are named below, of the subject matter which is claimed and for which a patent is sought on the invention entitled as set forth below, which is described in the attached specification; that I have reviewed and understand the contents of the specification, including the claims, as amended by any amendment specifically referred to in the oath or declaration; that no application for patent or inventor's certificate on this invention has been filed by me or my legal representatives or assigns in any country foreign to the United States of America; and that I acknowledge my duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, section 1.56(a);

TITLE OF INVENTION:	Equilibrium Based Horizontal Sync Detector for Video			
	Decoder			
POWER OF ATTORNEY:	I HEREBY APPOINT THE FOLLOWING ATTORNEYS TO PROSECUTE THIS APPLICATION AND TRANSACT ALL BUSINESS IN THE PATENT AND TRADEMARK OFFICE CONNECTED THEREWITH			
	Customer Number: 23494			
SEND CORRESPONDENCE TO:	DIRECT TELEPHONE CALLS TO:			
Dan Swayze Texas Instruments Incorporated		Dan Swayze		
P. O. Box 655474, M/S 3999	972-917-5633			
Dallas, Texas 75265		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
NAME OF INVENTOR: (1)	NAME OF INVENTOR: (2)	NAME OF INVENTOR: (3)		
Karl Renner	Walter Heinrich Demmer	Jason M. Meiners		
RESIDENCE (City and State Only)	RESIDENCE (City and State Only) RESIDENCE (City and State Only)			
Dallas, Texas	Nuremberg, Germany Richardson, Texas			
POST OFFICE ADDRESS	POST OFFICE ADDRESS	POST OFFICE ADDRESS		
7415 Hundley	Dormitzer Str. 3 3504 Waltham Drive			
Dallas, Texas 75231	Nuremberg, Germany 90411	Richardson, Texas 75082		
COUNTRY OF CITIZENSHIP:	COUNTRY OF CITIZENSHIP: COUNTRY OF CITIZENSHIP:			
USA	Germany	USA		
SIGNATURE OF INVENTOR:	SIGNATURE OF INVENTOR:	SIGNATURE OF INVENTOR:		
		2.		
DATE:	DATE:	DATE:		
		7/25/03		

ATTORNEY'S DOCKET NO. TT-35821

APPLICATION FOR UNITED STATES PATENT DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I declare that my residence, post office address and citizenship are as stated below next to my name; that I verily believe that I am the original, first and sole inventor if only one name is listed below, or an original, first and joint inventor if plural inventors are named below, of the subject matter which is claimed and for which a patent is sought on the invention entitled as set forth below, which is described in the attached specification; that I have reviewed and understand the contents of the specification, including the claims, as amended by any amendment specifically referred to in the oath or declaration; that no application for patent or inventor's certificate on this invention has been filed by me or my legal representatives or assigns in any country foreign to the United States of America; and that I acknowledge my duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, section 1.56(a);

TITLE OF INVENTION:	Equilibrium Based Horizontal Sync Detector for Video Decoder			
POWER OF ATTORNEY:	I HEREBY APPOINT THE FOLLOWING ATTORNEYS TO PROSECUTE THIS APPLICATION AND TRANSACT ALL BUSINESS IN THE PATENT AND TRADEMARK OFFICE CONNECTED THEREWITH			
	Customer Number: 23494			
SEND CORRESPONDENCE TO: Dan Swayze		DIRECT TELEPHONE CALLS TO		
Texas Instruments Incorporated P. O. Box 655474, M/S 3999 Dallas, Texas 75265		Dan Swayze 972-917-5633		
NAME OF INVENTOR: (4) Weider Peter Chang	NAME OF INVENTOR: (5) Airong Amy Zhang	NAME OF INVENTOR (6)		
RESIDENCE (City and State Only) Hurst, Texas	RESIDENCE (City and State Only) Plano, Texas	RESIDENCE (City and State Only)		
POST OFFICE ADDRESS 2800 Bremen Drive Hurst, Texas 76054	POST OFFICE ADDRESS 4405 Jenkina Drive Plano, Texas 75024	POST OFFICE ADDRESS		
COUNTRY OF CITIZENSHIP: USA	COUNTRY OF CITIZENSHIP: USA	COUNTRY OF CITIZENSHIP:		
SIGNATURE OF INVENTOR:	SIGNATURE OF INVENTOR:	SIGNATURE OF INVENTOR:		
7-21-03	7-21-03	DATE:		

ATTORNEY'S	DOCKET NO.
	TI-35821

ASSIGNMENT

WHEREAS, I, the undersigned inventor (or one of the undersigned joint inventors), of residence as listed, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made, the said application having been executed on the date set forth below; and

WHEREAS, TEXAS INSTRUMENTS INCORPORATED, a corporation organized and existing under the laws of the State of Delaware, with its principal office at 7839 Churchill Way, M.S. 3999, Dallas, TX 75251, is desirous of acquiring my entire right, title and interest in and to the said invention, and to the said application and any Letters Patent that may issue thereon;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell and assign to the said TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, my entire right, title and interest in and to the said invention and in to the said application and all patents which may be granted therefore, and all divisions, reissues, substitutions, continuations, and extensions thereof; and I hereby authorize and request the Commissioner of Patents and Trademarks to issue all patents for said invention, or patent resulting therefrom, insofar as my interest is concerned, to the said TEXAS INSTRUMENTS INCORPORATED as assignee of my entire

I also hereby sell and assign to TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, my foreign rights to the invention disclosed in said application, in all countries of the world, including the right to file applications and obtain patents under the terms of the International Convention for the Protection of Industrial Property, and of the European Patent Convention, and further agree to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

I hereby further agree that I will communicate to said TEXAS INSTRUMENTS INCORPORATED or to its successors, assigns, and legal representatives, any facts known to me respecting said invention, and at the expense of said assignee company, testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, reissue and substitute applications, make all lawful oaths, and generally do everything possible to aid said TEXAS INSTRUMENTS INCORPORATED, its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

IN WITNESS WHEREOF, I hereunto set hand and seal this day and year,

TITLE OF INVENTION	OF The state of th		
SIGNATURE OF INVENTOR AND NAME	(1)Karl Renner Karl Renner	(2)Walter Heinrich Denimer	(3)Jason M. Meiners
DATE	July 22,2003		
RESIDENCE (City, County, State)			
	Dallas, Dallas, Texas	Nuremberg, Germany	Richardson, Collin, Texas

After recording return Assignment to:

ATTORNEY'S DOCKET NO. TI-35821

ASSIGNMENT

WHEREAS, I, the undersigned inventor (or one of the undersigned joint inventors), of residence as listed, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made, the said application having been executed on the date set forth below; and

WHEREAS, TEXAS INSTRUMENTS INCORPORATED, a corporation organized and existing under the laws of the State of Delaware, with its principal office at 7839 Churchill Way, M.S. 3999, Dallas, TX 75251, is desirous of acquiring my entire right, title and interest in and to the said invention, and to the said application and any Letters Patent that may issue thereon;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell and assign to the said TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, my entire right, title and interest in and to the said invention and in to the said application and all patents which may be granted therefore, and all divisions, reissues, substitutions, continuations, and extensions thereof, and I hereby authorize and request the Commissioner of Patents and Trademarks to insue all patents for said invention, or patent resulting therefore, insofar as my interest is concerned, to the said TEXAS RISTRUMENTS INCORPORATED at assignce of my entire right, title and interest.

I also hereby sell and assign to TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, my foreign rights to the invention disclosed in said application, in all countries of the world, including the right to file applications and obtain patents under the terms of the International Convention for the Protection of Industrial Property, and of the European Patent Convention, and further agree to essents any and all patent applications, assignments, affidavits, and say other papers in connection therewith necessary to perfect such patent rights.

I hereby further agree that I will communicate to said TEXAS INSTRUMENTS INCORPORATED or to its successors, assigns, and legal representatives, any facts known to me respecting said invention, and at the expense of said assignee company, testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, reissue and substitute applications, make all lawful oaths, and generally do everything possible to aid said TEXAS INSTRUMENTS INCORPORATED, its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

IN WITNESS WHEREOF, I hercunto set hand and seal this day and year,

TITLE OF INVENTION	Equilibrium Based Horizontal Sync Detector for Video Decoder		
SIGNATURE OF INVENTOR AND NAME	(1)Karl Renner	(2)Walter Heinrich Demmer	(3)Jason M. Meiners
DATE		July 16, 2003	
RESIDENCE (City, County, State)	Dallas IX-III- W		
	Dallas, Dallas, Texas	Nuremberg, Germany	Richardson, Collin, Texas

After recording return Assignment to:

ATTORNEY'S DOCKET NO. TI-35821

ASSIGNMENT

WHEREAS, I, the undersigned inventor (or one of the undersigned joint inventors), of residence as listed, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made, the said application having been executed on the date set forth below; and

WHEREAS, TEXAS INSTRUMENTS INCORPORATED, a corporation organized and existing under the laws of the State of Delaware, with its principal office at 7839 Churchill Way, M.S. 3999, Dallas, TX 75251, is desirous of acquiring my entire right, title and interest in and to the said invention, and to the said application and any Letters Patent that may issue thereon;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell and assign to the said TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, my entire right, title and interest in and to the said invention and in to the said application and all patents which may be granted therefore, and all divisions, reissues, substitutions, continuations, and extensions thereof; and I hereby authorize and request the Commissioner of Patents and Trademarks to issue all patents for said invention, or patent resulting therefrom, insofar as my interest is concerned, to the said TEXAS INSTRUMENTS INCORPORATED as assignee of my entire right, title and interest.

I also hereby sell and assign to TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, my foreign rights to the invention disclosed in said application, in all countries of the world, including the right to file applications and obtain patents under the terms of the International Convention for the Protection of Industrial Property, and of the European Patent Convention, and further agree to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

I hereby further agree that I will communicate to said TEXAS INSTRUMENTS INCORPORATED or to its successors, assigns, and legal representatives, any facts known to me respecting said invention, and at the expense of said assignee company, testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, reissue and substitute applications, make all lawful oaths, and generally do everything possible to aid said TEXAS INSTRUMENTS INCORPORATED, its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

IN WITNESS WHEREOF, I hereunto set hand and seal this day and year;

TITLE OF INVENTION	Equilibrium Based	d Horizontal Sync Detecto	r for Video Decoder
SIGNATURE OF INVENTOR AND NAME	(1)Karl Renner	(2)Walter Heinrich Demmer	(3)Jason M. Meiners
DATE		()	7/25/03
RESIDENCE (City, County, State)	Dallas, Dallas, Texas	Nuremberg, Germany	Richardson, Collin, Texas

After recording return Assignment to:

ATTORNEY'S DOCKET NO. T1-35821

ASSIGNMENT

WHEREAS, I, the undersigned inventor (or one of the undersigned joint inventors), of residence as listed, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made, the said application having been executed on the date set forth below; and

WHEREAS, TEXAS INSTRUMENTS INCORPORATED, a corporation organized and existing under the laws of the State of Delaware, with its principal office at 7839 Churchill Way, M.S. 3999, Dallas, TX 75251, is desirous of acquiring my entire right, title and interest in and to the said invention, and to the said application and any Letters Patent that may issue thereon;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell and assign to the said TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, my entire right, title and interest in and to the said invention and in to the said application and all patents which may be granted therefore, and all divisions, reissues, substitutions, continuations, and extensions thereof; and I hereby authorize and request the Commissioner of Patents and Trademarks to issue all patents for said invention, or patent resulting therefrom, insofar as my interest is concerned, to the said TEXAS INSTRUMENTS INCORPORATED as assignee of my entire right, title and interest.

I also hereby sell and assign to TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, my foreign rights to the invention disclosed in said application, in all countries of the world, including the right to file applications and obtain patents under the terms of the International Convention for the Protection of Industrial Property, and of the European Patent Convention, and further agree to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

I hereby further agree that I will communicate to said TEXAS INSTRUMENTS INCORPORATED or to its successors, assigns, and legal representatives, any facts known to me respecting said invention, and at the expense of said assignee company, testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, reissue and substitute applications, make all lawful oaths, and generally do everything possible to aid said TEXAS INSTRUMENTS INCORPORATED, its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

IN WITNESS WHEREOF, I hereunto set hand and seal this day and year;

TITLE OF INVENTION	Equilibrium Based Horizontal Sync Detector for Video Decoder		
SIGNATURE OF INVENTOR AND NAME	(4)Weider Peter Chang	of wow	~ 6
DATE	2-21-03	7-21-03	
RESIDENCE (City, County, State)	Hurst, Tarrant, Texas	Plano, Collin, Texas	

After recording return Assignment to: